

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-22 (canceled)

Claims 23-32 (canceled)

33. (currently amended) A method of inducing regeneration and repair of nerve axon myelin coatings in a mammal with demyelination comprising:

systemically administering sufficient quantities of thrombopoietin to the mammal to induce endogenous production of platelet-derived growth factor in the mammal; and

systemically administering sufficient quantities of a thyroid ~~regulatory agent~~ hormone to regulate cell division and oligodendroglia production,

whereby regeneration and repair of nerve axon myelin coatings in a mammal with demyelination is induced.

34. (previously added) The method of claim 33 wherein the step of systemically administering the thrombopoietin comprises a method selected from the group consisting of oral administration, intravenous injection, intramuscular injection and intrathecal injection.

35. (canceled)

36. (currently amended) The method of claim ~~35~~ 33 wherein the step of administering the thyroid hormone comprises a method selected from the group consisting of oral administration, intravenous injection, intramuscular injection and intrathecal injection.

37. (currently amended) The method of claim ~~35~~ 33 wherein the thyroid hormone is a thyroid hormone extract.

38. (currently amended) The method of claim ~~35~~ 33 wherein the thyroid hormone is a synthetic thyroid hormone.

Claim 39-44 (canceled)

45. (currently amended) A method of inducing increased platelet production with secondary increased endogenous production of platelet-derived growth factor in a mammal, the platelet-derived growth factor serving as a therapeutic agent to stimulate regeneration or repair of nerve axon myelin coatings in a mammal with damaged neurons, the method comprising:

systemically administering sufficient quantities of thrombopoietin to the mammal to increase platelet production; and

systemically administering sufficient quantities of a thyroid ~~regulatory agent~~ hormone to regulate cell division.

46. (previously added) The method of claim 45 wherein the step of systemically administering the thrombopoietin comprises a method selected from the group consisting of oral administration, intravenous injection, intramuscular injection and intrathecal injection.

47. (canceled)

48. (currently amended) The method of claim ~~47~~ 45 wherein the step of administering the thyroid hormone comprises a method selected from the group consisting of oral administration, intravenous injection, intramuscular injection and intrathecal injection.

49. (currently amended) The method of claim ~~47~~ 45 wherein the thyroid hormone is a thyroid hormone extract.

50. (currently amended) The method of claim ~~47~~ 45 wherein the thyroid hormone is a synthetic thyroid hormone.

Claims 51 -60 (canceled)

61. (previously added) A method of inducing increased platelet production with secondary increased endogenous production of platelet-derived growth factor in a mammal, the platelet-derived growth factor serving as a therapeutic agent to stimulate regeneration or repair of nerve axon myelin coatings in a mammal with damaged neurons, comprising:

systemically administering from 1.0 to 100 µg/kg body weight per day of thrombopoietin to the mammal to induce endogenous production of platelet-derived growth factor in the mammal; and

systemically administering a thyroid regulatory agent to regulate cell division and oligodendroglia production, the thyroid regulatory agent selected from the group consisting of from about 0.10 to 0.125 mg per day of oral levothyroxine, from about 25 to 50 µg per day of oral liothyronine sodium, from about 32 to 160 µg per day of oral thyroglobulin, from about 15 to 120 mg per day of oral dessicated thyroid, and from about 50 to 200 µg per day of injected levothyroxine.